little objects which felt like small pebbles but turned out to be the fruiting calyces of this plant. They must have been carried home attached to my stockings or trousers or in my shoes, but I am puzzled to explain their transfer to the bed. They are unpleasant to walk on barefooted, but not nearly as much so as the fruits of *Tribulus* or *Cenchrus*. However interesting the plant may be as an addition to the flora of Maryland, that state has no need of any more weeds, and Mr. Simpson is attempting to eradicate it by cultural treatment before it spreads further. The railroad tracks at Bowie are sprayed regularly each summer, but it is very improbable that this procedure would have much effect on the multitude of seeds that must have been scattered previously from the plants growing there.—PLANT INDUSTRY STATION, BELTSVILLE, MD.

SHORTIA GALACIFOLIA IN GRAY'S MANUAL RANGE[1]

DOROTHY L. CRANDALL

Shortia galacifolia has been called by C. S. Sargent (1888) "one of the rarest and most interesting plants of North America" and since the first pressed specimen of *Shortia* was rediscovered by Asa Gray among Michaux's unknowns, search for this species has intrigued many botanists.

In a recent article in RHODORA, P. A. Davies (1955) lists seven counties in which *Shortia* has been found, one in Georgia, two in South Carolina, and four in North Carolina. No natural colonies have been reported from outside this rather restricted area and yet ecologically there are many similar habitats in other mountainous sections of the Southeast. Aware of its limited distribution, the author was somewhat surprised to discover a flourishing colony of *Shortia* along a creek in Amherst County, near Lynchburg, Virginia.

On the relatively steep east-facing bank (altitude approximately 650 feet) of this small creek, just a few feet above the water, was a patch of *Shortia* covering an area about three by six feet. On this date, April 9, 1955, only a few scattered blossoms were evident, varying from white to pale pink. Most

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of the earlier flowers had withered without forming fruit. Photographs were taken and specimens were collected. The latter are being deposited at the Gray Herbarium, the U. S. National Herbarium, and the herbaria of The University of Tennessee and Randolph-Macon Woman's College.

Downstream a few feet away from the original group, a small clump of three plants was growing. A search upstream disclosed three more plants about twenty feet away and another small group about four feet away. The stream was traced to its source, only a few hundred feet, but no more plants were seen.

The author made two subsequent trips to the site, one in the company of Franklin Flint of Randolph-Macon Woman's College and the other with Mr. Flint and Ruskin Freer of Lynchburg College. About 300 feet downstream at a point just above where this creek joins a still larger creek that flows into the James River about a half mile away, another clump of *Shortia* approximately two by three feet was located on a knoll overhanging the creek. A search for several miles up the larger creek failed to disclose any additional stations.

The first colony appeared to be well established and had spread both by stolons and by seeds. On bare and mossy soil and only seen when the overhanging leaves of *Shortia* were lifted, were dozens of seedlings of various sizes. In addition to these a few seedlings were observed several feet away from the parent plants, the seeds having washed down the steep bank. Bailey's Standard Cyclopedia of Horticulture (1933) states "It is difficult to procure seed as the flowering stem usually withers away before maturing, though shortia is readily propagated by division and runners." C. F. Jenkins (Arnoldia, 1947) adds "Apparently no plants were propagated in this way," referring to attempted propagation by seeds. On a visit to the area near the end of May a few flowers, perhaps a dozen or so in all, had formed capsules.

The conspicuous canopy trees included *Nyssa sylvatica*, *Fagus grandifolia* and *Liriodendron Tulipifera*. In the understory were *Cornus florida*, *Hydrangea arborescens*, *Alnus serrulata* and *Kalmia latifolia*. Intermingled with the colony were *Polystichum acrostichoides*, *Dryopteris noveboracensis* and *Athyrium*

Filix-femina. Important among the low flowering herbs were *Asarum virginicum*, *Iris cristata* and *Medeola virginiana*. *Galax aphylla* was abundant, the bank of the stream lower down carpeted with blankets of it.

A search of the area disclosed no old gardens from which *Shortia* could have escaped and local inquiries have yielded nothing as to the origin of these plants. The creek is part of a small farm which has changed hands many times and until the present owner purchased the land about ten years ago, no one had taken any interest in improving the property. Any information as to the possible introduction of these plants would be appreciated.

However this species may have first gained its foothold on this creek bank in Virginia, it is of interest that *Shortia* is flourishing and spreading both by seeds and stolons in an area within the range of Gray's Manual and considerably north of its previously known distribution in the Carolina mountains.—RANDOLPH-MACON WOMAN'S COLLEGE, LYNCHBURG, VIRGINIA.

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